

Park Science Readership Survey

By Kristen Martinson and Donald R. Field
NPS/CPSU, Oregon State University

The communication of scientific information to scientists, park managers, and special interests groups is vital to the continuance of science and to the sound management of natural and cultural resources. The communication process is critical to the translation of science into usable knowledge for the practitioner. *Park Science* is designed to be one forum for the dissemination of scientific information to professionals in the natural resource management field.

A survey on the readership of *Park Science* was conducted as a guide for the editorial board in evaluating whether the bulletin is meeting the intended goal. The primary objectives were to identify who reads *Park Science* and to assess the readers' evaluation of the bulletin.

Park Science is distributed in two ways; first to individual subscribers and second in bulk through region offices to individual National Park Service areas. The study was therefore conducted in 2 phases. In Phase one, general socio-demographic information was collected from individual subscribers to identify who reads the bulletin and then to solicit their evaluation on the content of *Park Science*. The goal in Phase two was to see how *Park Science* is viewed by specific park work units, and how use and evaluations of *Park Science* differ by the type of job and kind of NPS area where the job was located.

Information was collected through a questionnaire sent to participants in winter and spring of 1985. Eighty-two percent of the questionnaires were returned completed from the Phase one respondents and 70 percent (from 92 percent of the parks surveyed) were returned from Phase two respondents.

Characteristics of Subscribers

In summary, the majority of respondents from Phase one of the study are middle-aged males, employed by the NPS or other resource management agency, and have completed some graduate work in college. Specifically, the average age of the participants is 42 years with the greatest number of readers being 33 years old. Approximately six out of every seven respondents are male. The majority of readers have received higher educations, attending an average of 19 years of school. The most common areas of study during college or technical school were biology, forestry, and resource recreation management (including majors in park administration). Zoology, wildlife and botany were the next most common majors reported.

Most of the readers who responded reside in the western half of the United States, primarily in the Pacific Northwest and Western Regions of the National Park Service.

As expected, most participants are directly or indirectly involved with resource management as an occupation. The majority work with a natural resource oriented agency or a college of natural resources, or they write about natural resource issues. Individual subscribers comprise about one-third of the distribution and federal government employees constitute over half of these. Of these federal employees, 81 percent are with the NPS, primarily as natural scientists, managers, resource management specialists, and rangers. NPS employees have worked for the Service an average of 12 years, their experience

ranging from six months to over 30 years.

For those readers not employed by the federal government, the greatest percent are affiliated with a university as faculty, staff, or students. The next largest employer is state governments, primarily parks and recreation and fish and game departments.

Behavior and Evaluations

The overall behavior, or method, of reading of *Park Science* appears to be fairly attentive and comprehensive, particularly considering the extensive amount of literature passing through the readers' hands on a daily basis. Respondents generally have read or glanced through the last four issues beginning with the first feature article and continuing through the entire bulletin. They tend to save the entire issue or portions of it for future reference.

Content area evaluations show consistent findings in Phase I of the survey. The content areas with the widest appeal are the Feature Articles, followed by the Research Notes, Regional Highlights, and Information Crossfile. The sections which appear to appeal to a more select group of respondents are the Superintendents' Corner, Letters to the Editor, and Editorial. None of these last 3 sections was read very thoroughly, or found particularly interesting or influential to a great number of readers.

Variations by Park Type and Positions

For Phase two of the survey, three park types were identified; natural, recreational, and historic. The four general types of NPS positions identified were maintenance, resource management, visitor services/law enforcement, and interpretation.

Some interesting differences were noted by orientation of the park. Historic parks had the largest percent of interpreters who responded, perhaps because these are areas where the public often demands the most detailed interpretation of relatively recent events. Historic parks also had the fewest respondents in maintenance.

Overall, respondents from recreation oriented parks tend to be associated with resource management and the most comprehensive readers while those from historic parks seem to be the least comprehensive readers. From additional comments on the survey it has been assessed that many readers of *Park Science* from historic parks feel that much of the information covered is not readily applicable to them. The greatest percent of respondents who find the bulletin not useful are from historic parks.

Respondents from natural parks are also more often than not associated with resource management and particularly interested in Research Notes and Regional Highlights. This may be influenced by the fact that much of the biological and social research occurs in natural area parks. These respondents may enjoy reading about research they've been involved in or know of in their region.

Differences in some responses were also noted by the reader's position in the National Park Service. Responses from interpreters and law enforcement personnel do not differ significantly from the responses of all participants together. However,

maintenance and resource management personnel have fairly divergent response as well as different demographic characteristics. Readers in maintenance have, in general, been with the NPS longer, are older, and are less likely to have had any graduate work in natural or social science than those readers in resource management. This may result in maintenance personnel not being as integrated into scientific research and resource management issues as personnel who have more recently left academia and who are directly involved in arranging or conducting research in parks. As several comments indicated, some maintenance respondents feel that the bulletin is inadequately circulated to their division. Whether interested in *Park Science* or not they may not have as many opportunities to review the bulletin.

Overall, responses revealed that of the four divisions identified, readers in maintenance appear the least interested and influenced by *Park Science* while readers from resource management appear to be the most interested and influenced. Maintenance personnel are much more likely to circulate the bulletin, rather than save it. Perhaps this is an indication that these respondents would like the bulletin distributed better, or, on the other hand, that they have little use for *Park Science* after reviewing it once.

Comments

Many participants provided additional comments. Some requested more information and details to be provided in Research Notes and articles covering research projects. Some readers requested additional sections covering items such as employment opportunities and information on current meetings and symposiums, as well as articles on a wider variety of topics like visitor services, carrying capacities, archeology, and geology. Other topics of interest mentioned by respondents were information on laws and policies which affect the National Park Service, more articles on specific case studies describing problems and solutions, short technical "how-to" notes, annual reports on current research in the parks, and notes on computers and software applicable to NPS tasks.

Many respondents reported they enjoy the bulletin but rarely spend much time reading it while those whose employment is most directly linked with the content of *Park Science* indicated they wait anxiously to receive and read each new issue. Several participants suggested changes to improve the format and layout of *Park Science*. Some readers feel the bulletin hasn't found a proper place in the resource management literature, and yet it is beginning to "fill an important niche between the technical journals . . . and the popular magazines . . ."

Overall, *Park Science* appears useful to most respondents, primarily to keep them informed on current events in resource management. Though some readers would like to see changes in the bulletin, the majority of comments supported the publication and indicated that *Park Science* is a useful information source; "an information junkies' delight . . ."